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SALVIA VIRGATA (LAMIACEAE) NATURALIZED IN TEXAS

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ABSTRACT

Salvia virgata, a native of Asia and Europe, is documented from two populations as adventive in Kerr County, Texas. This mint is also known to be naturalized in California, where it is included in the state noxious weeds list.

Key Words: Lamiaceae, Labiatae, *Salvia,* Kerr County, Texas, United States.

Salvia virgata Jacq. (Lamiaceae), commonly known as wand sage or southern meadow sage (Fig. 1), is a perennial plant native to southeast Europe and southwest Asia, the distribution being essentially from Italy east to Pakistan (USDA, ARS (GRIN) 2012). In the United States, *S. virgata* has been documented in California, where it is included in the California State Noxious Weeds List (fide USDA, NRCS 2012). The species also is considered to be a weed by USDA, ARS (GRIN) (2012), apparently based upon the California disposition and the potential of the plant to become a seed contaminant. The species occurs at elevations between 270–830 m in the eastern Klamath Range, Cascade Range, and northern Sierra Nevada Range of California (Jepson Flora Project 2012).

In Texas, *Salvia virgata* was discovered in two locations in Kerr County, which is located in the Edwards Plateau vegetational area of the state (Gould 1962). These two locations, ultimately part of the Guadalupe River drainage, are about 3.4 km distant from each other. Both Texas populations presumably represent escapes from cultivation.

Voucher specimens: **USA. Texas.** Kerr Co.: 1.8 mi. NW of Ingram, 0.2 miles E of the jct. of Texas Hwy 27 and Ingram Hills Road, along right of way of Ingram Hills Road, 13 Apr 2012, *Susan Sanders s.n.* (BAYLU); 0.7 mi. W of Ingram, 0.1 mi. S of jct. of Texas Hwy 39 and Point Theatre Road on Point Theatre Road, on a 9 m bluff along Johnson Creek at confluence with the Guadalupe River, 12 Jul 2012, *Susan Sanders s.n.* (BAYLU).

Figure 1. *Salvia virgata* Jacq. from Kerr County, Texas (photo by Susan Sanders).

The first site (Ingram Hill Road), where plants were discovered but not collected in 2002, is in the flood plain of Henderson Branch Creek on Ingram Hills Road. When the plants were first discovered, the population comprised an estimated of 20–25 individuals. On 16 April 2012, the location was revisited and the number of individuals estimated to be slightly over 100, spaced 0.6–2.4 meters between individuals. Associated flora included *Bothriochloa ischaemum Thymophylla pentachaeta*, *Stenaria nigricans, Solanum elaeagnifolium*, *Gaura* sp., and *Phyla* sp.

The Point Theatre Road site is adjacent to Johnson Creek and covers an area of about 37 square miles. Between 300–400 individuals were at this site. Associated flora included *Elymus virginicus*, *Nassella leucotrichia*, *Calyptocarpus vialis, Lepidium virginicum*, and *Quercus buckley*.

The plants, which are rosulate, had taproots averaging about 15.2 cm in length. This may indicate that *Salvia virgata* has access to deeper soil moisture during dry weather events, thereby increasing survivability in this area that averages about 64 cm of rain per year (value from Map 3,

Correll & Johnston 1970). Survivability should be furthered at both sites because of the alluvial soils, which should hold moisture for a longer period after rain events than does the surrounding, more elevated landscape.

Turner et al. (2003) included distribution maps for 23 species of *Salvia* in Texas, with no species being included in the list of adventives. Correll and Johnston (1970) treated 22 species of *Salvia* in the state, with one species, *S. hispanica* L., not considered native.

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